

PATENT

Atty Docket No.: 10008388-1
App. Ser. No.: 10/066,096

REMARKS

Favorable reconsideration of this application respectfully requested in view of the foregoing amendments and the following remarks.

Claims 1-27 are pending of which claims 1, 20, 22 and 27 are independent.

Claims 5 and 6 were objected to as being of an improper Markus type.

Claim 21 was objected for a minor informality.

Claims 1-27 were rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter.

Claims 1-27 were rejected under 35 U.S.C. §102(b) as being anticipated by Lazarus et al. (U.S.P. No. 6,134,532).

These rejections are respectfully traversed for at least the following reasons.

Drawings

It is noted with appreciation that the previously-filed drawings are accepted.

Claim Objections

Claims 5 and 6 were objected as being of an improper Markus type because of the phrase "combination thereof". Claims 21 was objected for a minor informality regarding the term "a_5". Claims 5 and 6 have been amended to remove the phrase "combination thereof." Likewise, claim 21 has been amended to remove the term "a_5." Accordingly, it is requested that the objection to claims 5, 6, and 21 be withdrawn.

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Claim Rejections Under 35 U.S.C. §101

Claims 1-27 are rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. The Examiner indicated that amending independent claims 1, 22, and 27 to include the term "computerized" in the preamble as a modifier to "method/system" would overcome the rejection. Claims 1, 22, and 27 have been amended as suggested by the Examiner. Likewise, independent claim 20 has been amended to include the term "computerized" in the preamble. Accordingly, it is respectfully requested that the rejection under 35 U.S.C. §101 be withdrawn.

Claim Rejections Under 35 U.S.C. §102(b)

The test for determining if a reference anticipates a claim, for purposes of a rejection under 35 U.S.C. § 102, is whether the reference discloses all the elements of the claimed combination, or the mechanical equivalents thereof functioning in substantially the same way to produce substantially the same results. As noted by the Court of Appeals for the Federal Circuit in *Lindemann Maschinenfabrick GmbH v. American Hoist and Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984), in evaluating the sufficiency of an anticipation rejection under 35 U.S.C. § 102, the Court stated:

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.

Therefore, if the cited reference does not disclose each and every element of the claimed invention, then the cited reference fails to anticipate the claimed invention and, thus, the claimed invention is distinguishable over the cited reference.

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The Examiner rejected claims 1-27 under 35 U.S.C. §102(b) as being anticipated by Lazarus et al.

As stated in the disclosure of the present application, it is desirable for there to be a mechanism that analyzes hierarchies and determines the quality of the arrangement of topics and corresponding documents for each place (e.g., a particular topic subtree) in the hierarchy. Specification, p. 3, ll. 25-27. According to one embodiment in the disclosure of the present application, there is provided a method to determine a measure of coherence for the arrangement of hierarchically organized topics at each place in the hierarchy. Specification, p. 5, ll. 2-4.

Quite differently, the Examiner's cited reference, Lazarus et al., shows a system and method for selecting and presenting personally targeted entities such as advertising, coupons, products and information content, based on tracking observed behavior on a user-by-user basis and utilizing an adaptive vector space representation for both information and behavior. The system is based on an information representation called content vectors that utilizes a constrained self organization learning technique to learn the relationships between symbols (typically words in unstructured text). Users and entities are each represented as content vectors. Thus, Lazarus et al. is not concerned with analyzing arrangements of hierarchies.

Claim 1

Claim 1 recites, *inter alia*, "receiving a *hierarchy* of nodes." (Emphasis added). Yet, the Examiner cited Lazarus et al. at col. 24, ll. 55-67 and col. 25, ll. 1-15 to anticipate such claimed limitations. Specifically, the Examiner stated,

"RDA module will create clusters or nodes that are positioned in n dimensional space that defines a hierarchy." Office Action, p. 3.

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The Examiner's assertion that the n dimensional space "defines a hierarchy" appears to be unsupported by Lazarus et al. It is respectfully submitted that Lazarus et al. merely shows an RDA module 236 performing unsupervised categorization or clustering of the contents of the profile vector database 225, the entity vector database 230 or both of these modules. Lazarus et al. further states,

"The result of the clustering is a *set of cluster centroid vectors that represent regions of high density*. These centroids are the same type of vectors that are used for all the other processing operations." Lazarus et al., col. 24, ll. 60-61.

Thus, Lazarus et al. fails to show any *hierarchy* of nodes as claimed. Even assuming that the Examiner's interpretation of clusters in Lazarus et al. as the claimed nodes is correct, those clusters are not arranged in a *hierarchy*. At best, as admitted by the Examiner, Lazarus et al. shows that the clusters are positioned in n dimensional space, which cannot be defined as a hierarchy as asserted by the Examiner, especially when Lazarus et al. fails to further show that such n dimensions of clusters are arranged in a hierarchical manner. Furthermore, Lazarus et al. fails to show the clusters being arranged in a hierarchy as conventionally understood and, for example, shown in FIG. 5 of the present disclosure, wherein a parent node has children nodes that are sibling nodes to one another, and each of the nodes can have its own subtree.

Claim 1 also recites, *inter alia*, "receiving a plurality of training cases that are filed under said nodes." In contrast, it is respectfully submitted that Lazarus et al. actual shows the training cases being used to *create* (rather than being filed under) the clusters that the Examiner defined as nodes. As mentioned earlier, Lazarus et al. shows an RDA module performing clustering of content vectors of the profile vector database and/or entity vector database. However, those content vectors are created from training vocabulary or cases (see

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Lazarus et al. at col. 25, ll. 40-54). In effect, the training vocabulary is used to create the clusters and *not* to file under the created clusters. Indeed, once the clusters are created, there is no longer a need for the training vocabulary to be filed under the clusters, and Lazarus et al. fails to disclose such feature.

Accordingly, it is respectfully submitted that claim 1 and associated dependent claims 2-19 are neither disclosed nor made obvious by the references of record.

Claim 2

Claim 2 further recites, *inter alia*, "determining, for the *subtree at the node*, the number of the training cases..." (emphasis added). As stated above regarding claim 1, Lazarus et al. fails to show a *hierarchy* of nodes; therefore, there could not be any showing of a subtree at the node because such subtree indicates the node to be in a hierarchy. The Examiner's assertion that "the subtree at the node would be adjacent clusters" is not supported by Lazarus et al., especially when, as stated earlier, Lazarus et al. does not even show that the clusters are arranged in a hierarchical manner. At best, adjacent clusters are merely neighboring clusters and not subtrees of each other.

Claim 2 also recites, *inter alia*, "determining predictive features that distinguish the subtree of the current node from the *local environment of the node*." While the Examiner has erroneously defined the claimed subtree in Lazarus et al., the Examiner made no mention of the claimed local environment of the node, i.e., clusters as defined by the Examiner, and how such local environment would be different from the erroneously-identified subtree.

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Claim 20

Claim 20 recites, *inter alia*, "a subtree and a local environment in a hierarchy." Thus, claim 20 cannot be anticipated by Lazarus et al. for at least the same reasons set forth earlier regarding claims 1 and 2.

Accordingly, it is respectfully submitted that claim 20 and associated dependent claim 21 are neither disclosed nor made obvious by the references of record.

Claim 22

Claim 22 recites, *inter alia*, "nodes in a topic hierarchy" and "subtree of the node." Thus, claim 22 cannot be anticipated by Lazarus et al. for at least the same reasons set forth earlier regarding claims 1 and 2.

Accordingly, it is respectfully submitted that claim 22 and associated dependent claim 23-26 are neither disclosed nor made obvious by the references of record.

Claim 27

Claim 27 recites, *inter alia*, "receiving a hierarchy and the training cases filed into said hierarchy" and "children subtrees" of a node. Thus, claim 27 cannot be anticipated by Lazarus et al. for at least the same reasons set forth earlier regarding claims 1 and 2.

Accordingly, it is respectfully submitted that claim 27 is neither disclosed nor made obvious by the references of record.

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Conclusion

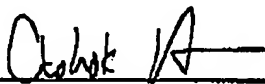
For at least all of the above reasons, it is respectfully submitted that the present invention is neither disclosed nor suggested by the references of record, and the claims now pending patentably distinguish the claimed invention from the references of record. Accordingly, reconsideration and withdrawal of the outstanding rejections and an issuance of a Notice of Allowance are earnestly solicited.

Should the Examiner believe that a telephone conference with the undersigned would assist in resolving any issues pertaining to the allowability of the above-identified application, please contact the undersigned at the telephone number listed below. Please grant any required extensions of time and charge any fees due in connection with this request to deposit account no. 08-2025.

Respectfully submitted,

Dated: June 27, 2005

By



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